

# Number Plate Detection for parking assist and Road Safety

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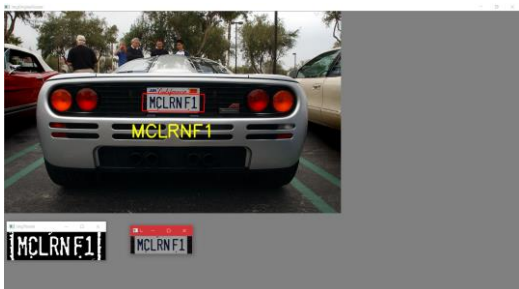
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## Abstract:

As an Engineer and an Indian citizen, Parking is major problem in our country as well in our surroundings such as Apartments, Educational Institutions etc. and also road Safety. This problem can be autonomously monitored. Vehicle parking is an important component within any transportation system, whereby vehicles are often parked at destinations. With an increased number of motor vehicles on roads especially in developing countries, there is need for a vehicle identification mechanism that is effective, affordable and efficient. In most academic institutions, apartments and car parks, the ongoing car park entry registration process for visitors, staff or students entering the institution involves a security guard having to confirm membership details by checking for membership sticker on the windscreen of the vehicle or by checking the driver's identification card. This process of writing is tedious and time consuming and is prone to inaccurate recordings, furthermore the backup and sharing of this vehicle information is difficult because the data is hard copy. This process can be automated using Image Processing and a dedicated Android Application for owners and Police men with automatic theft control, Email and messaging. Road Safety on other side is also done using the same application where the user can file complaints regarding the traffic violations, accident, women harassments etc., which will be automatically updated in the police application. And he/she can take necessary decisions. Concluding, this proposed project can bring a new revolution in parking assist as well as road and women safety.

## Keywords:

Image Processing, Spyder, Firebase, MySQL, MIT App Inventor, Android Application, Raspberry Pi, Pi Cam/Web cam.



```
In [2]: runfile('C:/Users/Senthil/Desktop/OpenCV_3_License_Plate_Recognition_Python-master/Main.py', wdir='C:/Users/Senthil/Desktop/OpenCV_3_License_Plate_Recognition_Python-master')
Reloaded modules: DetectChars, Main, DetectPlates, Preprocess, PossiblePlate, PossibleChar

12 possible plates found

license plate read from image = MCLRN F1

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MCLRN F1

In [3]:
```

Python console History  
conda: base (Python 3.7.3) Line 30, Col 53 ASCII LF RW Mem 74%